

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

Claims 1-17 (canceled).

18. (New) A self cooling packaging comprising:

a cavity forming a heat exchanger and containing a refrigerant liquid and the vapour thereof;

a cavity forming an adsorption chamber for pumping of said vapour;

a connection provided in a common wall of said cavities, said connection comprising a check valve;

an actuator disposed on the side of the adsorption chamber cavity and adapted to push the check valve inside the heat exchanger cavity to an initial partly open position;

a spring adapted to progressively push the check valve further inside the heat exchanger cavity from its initial partly open position to a fully open position.

19. (New) The self cooling packaging according to claim 18, wherein the check valve is adapted to withstand pressure exerted on the side of the heat exchanger cavity and can be opened inside said heat exchanger cavity under the effect of a force exerted by said actuator and said spring.

20. (New) The self cooling packaging according to claim 18, wherein the spring is at rest when said connection is in a closed position and is loaded by said actuator in the initial opening position.

21. The self cooling packaging according to claim 18, wherein the spring is part of the actuator.

22. The self cooling packaging according to claim 18 wherein the spring is part of the connection.

23. (New) The self cooling packaging according to claim 22, wherein the actuator comprise a plunger rod.

24. (New) The self cooling packaging according to claim 23, wherein the spring has a spring stroke comprised between 0.5 and 0.7 of the actuator plunger rod stroke.

25. (New) The self cooling packaging according to claim 18, wherein the spring comprises a helical spring.

26. (New) The self cooling packaging according to claim 18, wherein the spring comprises a tongue.

27. (New) The self cooling packaging according to claim 18, wherein the check valve has a plate disk shape.

28. (New) The self cooling packaging according to claim 18, wherein the connection comprises a conical shape check valve and a conical shape valve seat formed in the common wall.

29. (New) The self cooling packaging according to claim 28, wherein the conical shape has an angle with respect to the common wall comprised between  $15^{\circ}$  and  $30^{\circ}$ .

30. (New) The self cooling packaging according to claim 18, wherein the connection comprises a sealing member being compressed in a storage position in a direction perpendicular to the check valve opening direction.

31. (New) The self cooling packaging according to claim 18, further comprising a liquid/gas state separating device disposed in the heat exchanger cavity.

32. (New) The self cooling packaging according to claim 31, wherein said liquid/gas state separating device defines a solid angle that includes the connection.

33. (New) A method for cooling the content of a self cooling packaging, said packaging comprising:

a cavity forming a heat exchanger and containing a refrigerant liquid and the vapour thereof;

a cavity forming an adsorption chamber for pumping of said vapour;

a connection provided in a common wall of said cavities, said connection means comprising a check valve ;

an actuator disposed on the side of the adsorption chamber cavity;

a spring;

the method comprising the steps of:

pushing the check valve inside the heat exchanger to an initial partly open position under the action of said actuator;

pumping the vapour of the refrigerant liquid from the heat exchanger cavity to the adsorption chamber cavity ;

progressively pushing the check valve further inside the heat exchanger to a larger opening with respect to the decrease of the pressure inside the heat exchanger cavity under the action of said spring.

34. (New) A method according to claim 33, comprising the step of further dropping the check valve inside the heat exchanger cavity when the pressure therein has decreased to below a threshold value.